

### Rubric: Research Proposal Oral Presentation

Category	Elements of a strong presentation	Weight (%)
<b>Knowledge and explanation of subject matter:</b>	<ul style="list-style-type: none"> <li>relates proposal to topics covered in 20.109 when appropriate</li> <li>sufficiently explains concepts/ methods/etc. <i>not</i> covered in 20.109</li> </ul>	70
Idea	<ul style="list-style-type: none"> <li>the what, why, and how (<i>are you going to do it</i>) of the idea are each clear and compelling</li> <li>the project scope is reasonable</li> <li>exhibits novelty/creativity</li> </ul>	(15)
Overview	<ul style="list-style-type: none"> <li>clear and concise description of the central question to be investigated, <i>and</i> its significance</li> </ul>	(2)
Background	<ul style="list-style-type: none"> <li>sufficient for intelligent non-experts to understand the proposal</li> <li>describes/credits relevant prior art</li> </ul>	(7)
Problem and Goals	<ul style="list-style-type: none"> <li>well-defined hypothesis and goals</li> </ul>	(3)
Details/Methods	<ul style="list-style-type: none"> <li>staged roadmap for investigation</li> <li>the experiments address the central question and include good controls</li> <li>methods needed to understand the predicted outcomes are explained, without unnecessary detail</li> </ul>	(15)
Outcomes	<ul style="list-style-type: none"> <li>show sample data if experiment works (summarize in tabular form, make mock graphs, show published images from similar work, etc.)</li> <li>describe alternate assays, questions, and/or information still gained if experiment does not work</li> </ul>	(15)
Resources	<ul style="list-style-type: none"> <li>consider specialized resources needed (e.g., plasmids, cell lines, access to large/costly equipment)</li> <li>detail is good, but not needed for every resource. ditto budget info.</li> </ul>	(3)
Impact and Summary	<ul style="list-style-type: none"> <li>reiterate question, detail its importance to science and society</li> </ul>	(3)
Q&A	<ul style="list-style-type: none"> <li>answers that convey understanding</li> <li>admit when you lack knowledge, tell how you would approach the question based on what you know</li> </ul>	(7)

<b>Overall organization of talk</b>	<ul style="list-style-type: none"> <li>• content introduced in logical, easy-to-follow sequence</li> <li>• main points emphasized, repeated</li> <li>• transition statements between ideas</li> </ul>	5
<b>Overall effectiveness of slide text/visuals</b>	<ul style="list-style-type: none"> <li>• slide titles convey key message</li> <li>• good balance of text and figures</li> <li>• text/figures large enough to be seen</li> <li>• considered use of color</li> <li>• not too many or too few slides</li> </ul>	10
<b>Overall effectiveness of delivery</b>	<ul style="list-style-type: none"> <li>• all elements of a good individual presentation (effective use of voice, body, and language), plus:</li> <li>• collaborative effort: partners speak for equal times, don't interrupt each other, take turns being "on stage"</li> <li>• overall appears rehearsed, with smooth transitions between speakers, talk is cohesive</li> <li>• review/preview structure of talk</li> <li>• 10' length (+/- 0.5 min)</li> </ul>	10
<b>Talking points</b>	<ul style="list-style-type: none"> <li>• main points to be made during talk (can be incomplete sentences)</li> <li>• well thought-out transitions</li> <li>• best work will include supporting detail, in case needed for Q&amp;A</li> </ul>	5